

Title (en)

POLARIZATION CONVERSION METHOD FOR LIQUID CRYSTAL DISPLAYS

Title (de)

VERFAHREN ZUR POLARISATIONSUMWANDLUNG FÜR FLÜSSIGKRISTALLANZEIGEN

Title (fr)

PROCEDE DE CONVERSION DE POLARISATION POUR ECRANS A CRISTAUX LIQUIDES

Publication

**EP 1459122 A2 20040922 (EN)**

Application

**EP 02790604 A 20021217**

Priority

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- US 2477501 A 20011219

Abstract (en)

[origin: US2003112511A1] A non-polarized input beam has a waist matching that of the light input surface of a polarizing beam splitter wherein the beam is divided into P and S components. The P component exits through a ½ wave retarder and the S component is directed to a turning prism from which it exits in tandem with the P component to form an output beam having a geometrical extent substantially twice that of the input beam. The P and S components are confined by sides of the splitter and the prism, respectively, by Total Internal Reflection, thereby achieving high efficiency without increasing the size of the optical components from that of lower efficiency, prior art polarization converters.

IPC 1-7

**G02B 27/28**

IPC 8 full level

**G02B 5/30** (2006.01); **G02B 27/28** (2006.01)

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